AMENDMENTS TO THE CLAIMS

1.   (Previously Presented) A method of validating an identity of a user using a pointing device comprising the steps of:

providing data for the display of a background image, the background image providing a user with visual reference points to help the user to remember and create their signature,

providing data for positioning at least one object on said background image,

receiving a sampled pointing device (PD) signature including a set of position vectors, said PD signature generated by sampling a plurality of events corresponding to positions of a cursor while operating said pointing device to provide data relative to said background image,

comparing said sampled PD signature to a stored PD signature representing the identity of the user, and

validating said identity of said user in response to said comparing step.

2.   (Previously Presented) The method of claim 1 wherein moving said PD manipulates said cursor on said background image.

3.   (Previously Presented) The method of claim 2 wherein operating said PD includes moving a mouse.

4.   (Previously Presented) The method of claim 1 wherein said PD signature includes data generated by clicking of said pointing device.

5.   (Previously Presented) The method of claim 1 wherein said sampling of a plurality of events includes a drag and drop event by said pointing device.

6.   (Previously Presented) The method of claim 1 wherein said sampling of a plurality of events includes sampling a time component.

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7.   (Previously Presented) The method of claim 1 wherein said step of comparing includes applying a set of nodes to analyze said sample signature and determining if said sample signature satisfies a threshold matching criteria.

8.   (Previously Presented) The method of claim 1 further comprising the steps of:
receiving a plurality of signature exemplars; and
creating a set of nodes associated with said exemplars.

9.   (Previously Presented) The method of claim 1 wherein displaying said background image includes displaying a graphic.

10.   (Previously Presented) The method of claim 1 wherein operating said pointing device includes positioning said cursor relative to said objects.

11.   (Previously Presented) The method of claim 1 wherein operating said pointing device includes positioning a draggable icon on said background image.

12.   (Original) The method of claim 1 wherein said step of sampling a plurality of events includes sampling horizontal and vertical positions of said cursor and a time parameter associated with respective ones of said events.

13.   (Original) The method of claim 1 wherein said step of sampling a plurality of events includes sampling a mode of said input device.

14.   (Original) The method of claim 13 wherein said step of sampling a mode of said input device includes a step of sampling a normal mode, a "drag and drop" mode, or a click mode of said input device.

15.   (Original) The method of claim 1 wherein said PD signature is generated by processing said set of position vectors including processing a series of said events using a plurality of nodes.

16.   (Original) The method of claim 1 further comprising a step of:

receiving a verification request from a provider; and

issuing in response to said step of validating, an authorization message to said provider.

17.   (Previously Presented) A software stored on a computer readable medium for validating a user's identity comprising software configured to perform the steps of:

providing data for the display of an object map to a user;

receiving data representing signature characteristics generated by processing a set of position vectors resulting from user manipulation of a cursor to draw lines or reposition or click on one or more icons positioned on a background image, the background image providing the user with visual reference points to help the user remember and create their signature, using an input device to provide a sample of a plurality of events corresponding to positions of said cursor so as to further provide a sampled signature including said set of position vectors;

comparing said signature characteristics to characteristics of a stored signature representing the user's identity;

validating said user's identity in response to said comparing step.

18.   (Previously Presented) The software on a computer readable medium of claim 17 wherein using said PD to manipulates said cursor on a background image.

19.   (Previously Presented) The software on a computer readable medium of claim 18 wherein using said pointing device includes moving a mouse.

Claims 20 – 32 (cancelled)

33.   (Previously Presented) A verification server for use in a signature recognition system including a user computer system having a pointing device and a display screen, the user computer system operational to (i) display a virtual pad on said display screen, (ii) respond to a positioning of said pointing device to position a cursor on said virtual pad, and (iii) provide a collection of vectors describing an operation of said pointing device with respect to said cursor;

said verification server comprising:

an interface in communication with said user computer system for receiving said collection of vectors associated with drawing lines or the reposition or click on one or more icon positioned on a background image, the background image providing the user with visual reference points to help the user remember and create their signature,

a signature recognition engine configured to (i) process said vectors, (ii) compare said processed vectors to exemplar signature data and, in response, (iii) provide signature recognition data.

Claims 34 – 48 (Cancelled)

49.   (Previously Presented) The method of claim 1 wherein providing data for the display of a background image includes downloading a virtual pad consisting of said background image and said object.

50.   (Previously Presented) The method of claim 49 further comprising repositioning said objects on said background image to create said PD signature.

51.   (Previously Presented) The method of claim 1 further comprising displaying said background image on a computer display screen.

52.   (Previously presented) The software stored on a computer readable medium of claim 17 wherein said step of displaying includes displaying a background image and an icon on a computer display screen.

53.   (New) The software on a computer readable medium of claim 17 wherein said step of comparing includes applying a set of nodes to analyze said sample signature and determining if said sample signature satisfies a threshold matching criteria.

54.   (New) The software on a computer readable medium of claim 17 wherein said step of processing said set of position vectors includes processing a series of said events using a plurality of nodes.

55.   (New) The verification server of claim 33 wherein said processing comprises:

locating a plurality of nodes in a space associated with said collection of vectors;

executing a minimum cost routine to reposition said nodes in said space to a characteristic set of positions relative to said collection of vectors; and

formulating a description of a geometry of said characteristic set of positions to provide a signature characteristic record.